

- 50 -

CLAIMS

1. A polyester film comprising a mixture of 70% to 97% by weight of polyester A and 3% to 30% by weight of polyester B, the polyester film having a melting point in the range of 245 to 270°C, wherein polyester A is mainly composed of a repeating unit comprising ethylene terephthalate, and polyester B is mainly composed of a repeating unit comprising butylene terephthalate.

2. The polyester film according to Claim 1, wherein polyester A mainly composed of a repeating unit comprising ethylene terephthalate has an intrinsic viscosity in the range of 0.55 to 0.75, and polyester B mainly composed of a repeating unit comprising butylene terephthalate has an intrinsic viscosity in the range of 0.80 to 1.35.

3. A polyester film comprising a polyester resin containing an ethylene terephthalate component, a butylene terephthalate component, and a polyoxyalkylene glycol component, wherein the content of the ethylene terephthalate component is in the range of 60% to 90% by weight relative to the total amount of the ethylene terephthalate component, the butylene terephthalate component, and the polyoxyalkylene glycol component, the content of the butylene terephthalate component is in the range of 10% to

40% by weight relative to the total amount of the ethylene terephthalate component, the butylene terephthalate component, and the polyoxyalkylene glycol component, and the content of the polyoxyalkylene glycol component is in the
5 range of 0.1% to 5% by weight relative to of the total amount of the ethylene terephthalate component, the butylene terephthalate component, and the polyoxyalkylene glycol component.

10 4. The polyester film according to Claim 3, wherein the content of the polyoxyalkylene glycol component in the polyester resin is in the range of 0.1% to 3% by weight.

15 5. The polyester film according to Claim 3 or 4, wherein the polyoxyalkylene glycol is poly(tetramethylene glycol).

6. The polyester film according to any one of Claims 3 to 5, wherein the polyoxyalkylene glycol component is added in a form of polyether-ester being a block copolymer with a
20 polyester.

7. The polyester film according to Claim 6, wherein the polyether-ester has a glass transition temperature in the range of -120 to 0°C.

8. The polyester film according to Claim 6 or 7, prepared by blending: a polyester mainly composed of a repeating unit comprising ethylene terephthalate, having an intrinsic viscosity in the range of 0.55 to 0.75; a polyester mainly
5 composed of a repeating unit comprising butylene terephthalate, having an intrinsic viscosity in the range of 0.80 to 1.35; and a polyester block-copolymerized with the polyoxyalkylene glycol component.
- 10 9. The polyester film according to any one of Claims 1 to 8, wherein the polyester film has a tear propagation resistance of 8 kN/m or more in the longitudinal direction thereof.
- 15 10. The polyester film according to any one of Claims 1 to 9, wherein the polyester film has an elastic modulus in the range of 3 to 7 GPa in the longitudinal direction thereof.
- 20 11. The polyester film according to any one of Claims 1 to 10, wherein the Vickers hardness thereof measured at a depth of 0.2 μm with a thin-film hardness tester is in the range of 100 to 500 MPa.
- 25 12. The polyester film according to any one of Claims 1

to 11, wherein no melting point is observed in the range of 150 to 235°C when the film is melted, rapidly cooled, and reheated.

5 13. The polyester film according to any one of Claims 1 to 12, wherein the polyether-ester has a plane orientation coefficient in the range 0.10 to 0.16.

10 14. The polyester film according to any one of Claims 1 to 13, wherein the polyester film has a thickness in the range of 5 to 50 μm and a haze in the range of 0.1% to 5%.

15 15. The polyester film according to any one of Claims 1 to 14, wherein the polyester film is used for packaging.

16 16. The polyester film according to any one of Claims 1 to 15, wherein the polyester film is biaxially oriented.

20 17. A gas barrier polyester film comprising: the polyester film as set forth in any one of Claims 1 to 16; and a layer deposited on at least one surface of the polyester film, the layer comprising at least one metal compound selected from the group consisting of metallic aluminium, aluminium oxide, and silicon oxide.